

Title (en)
Electrochemical device with stack

Title (de)
Elektrochemische Anordnung zum Stapeln

Title (fr)
Dispositif électrochimique à empilement

Publication
EP 3012892 B1 20170719 (FR)

Application
EP 14190301 A 20141024

Priority
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Abstract (en)
[origin: US2016115603A1] The invention relates to an electrochemical device intended for the production of products through electrochemical reaction of reactants, said electrochemical device comprising a stack of electrochemical cells (10), each cell (10) comprising a structure (16), two bipolar plates (18a, 18b) shared with adjacent cells (10), a membrane/electrode assembly (20) and two intermediate elements (21, 22) arranged to carry a current and the reactants/products to/from the membrane/electrode assembly (20). According to the invention, said structure (16) of the cell (10) comprises a single frame (23) made in one piece, said frame (23) having upper and lower faces respectively arranged to form a plane contact with the bipolar plates (18a, 18b) disposed on either side of said frame (23), and a central opening (26) arranged to receive the membrane/electrode assembly (20) and the two intermediate elements (21, 22), said frame (23) comprising all the orifices (38, 40, 42, 44) necessary for feeding reactants and evacuating products, and housings (34, 54a, 58a, 60a) arranged to receive sealing means (36, 56a, 56b; 62a, 62b, 64a, 64b) ensuring the sealing of each reactant and product.

IPC 8 full level
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